

## EXPERIMENTAL INSTRUCTIONS

This appendix contains a sample of the instructions given to subjects. It corresponds to the 3, 2 market treatment.

### INSTRUCTIONS

[SCREEN 0]

Thank you for agreeing to participate in this decision making experiment. During the experiment we require your complete, undistracted attention, and ask that you follow instructions carefully. You may not open other applications on your computer, chat with other students, or engage in other distracting activities, such as using your phone, reading books, etc.

You will be paid for your participation in cash, at the end of the experiment. Different participants may earn different amounts. What you earn depends partly on your decisions, partly on the decisions of others, and partly on chance.

The entire experiment will take place through computer terminals, and all interaction between you will take place through the computers. It is important that you not talk or in any way try to communicate with other participants during the experiments.

We will start with a brief instruction period. During the instruction period, you will be given a complete description of the experiment and will be shown how to use the computers. If you have any questions during the instruction period, raise your hand and your question will be answered out loud so everyone can hear. If you have any questions after the experiment has begun, raise your hand, and an experimenter will come and assist you.

The experiment you are participating in is a committee voting experiment, where you will have an opportunity to buy and sell votes before voting on an outcome.

At the end of the experiment you will be paid the sum of what you have earned, plus a show-up fee of \$10.00. Everyone will be paid in private and you are under no obligation to tell others how much you earned. Your earnings during the experiment are denominated in POINTS. Your DOLLAR earnings are determined by multiplying your earnings in POINTS by a conversion rate. For this experiment the conversion rate is 0.03, meaning that 100 POINTS equal 3 DOLLARS.

The experiment will have 25 matches. At the beginning of the first match, you will be randomly assigned with 4 other persons in the room to form a 5-member committee, which will vote to decide on outcome X or outcome Y. Of the 5 members of your committee, 3 members are in favor of X; the other 2 members are in favor of Y. Whether you are in favor of X or Y is decided randomly by the computer and will be displayed on your computer

monitor.

You are also randomly assigned an “outcome value”, which is a payoff you get if your preferred outcome is the committee decision. Your assigned “outcome value” is equally likely to be any integer from 1 to 100 points. Different members are randomly assigned different outcome values. If you are in favor of X, you will earn your value if X is the committee decision and zero if Y wins. Similarly, you will earn your value if you are in favor of Y and Y is the committee decision, and zero otherwise. Outcome X is the committee decision if there are more votes for X than for Y and vice versa.

Each committee member starts the match with one vote. After being told your outcome value, but before voting, there will be a 3 minute trading period, during which you and the other members of your committee will have an opportunity to buy or sell each other’s votes. We will describe how trading occurs momentarily.

After the trading period ends, we proceed to the voting stage. In this stage you do not really have any choice. You will simply be asked to click a button to cast all your votes, if you have any, for your preferred outcome. When all committees have finished, the first match is complete and we will go to the next match. You will be randomly re-matched into new 5-person committees, and will repeat the procedure described above.

This will continue for a total of 25 matches.

[SCREEN 1]

When we begin a match, you will see a screen like this. Your Subject ID# is printed at the very top left of your screen, and remains the same through the whole experiment.

The current match number, your outcome value and your group (outcome preference) are displayed below your subject ID in the left part of the screen. Notice that this is an example of a committee member in favor of X with value 80. The numbers on this slide are for illustration only. Your outcome values will always be between 1 and 100. Below your value is a table that clarifies how many votes each member of the committee currently has, the group each member is in, and assigns you a temporary committee member number for this match. Your information is highlighted in green and the other members’ information is not highlighted. Notice that you do not see the values of the other members.

The middle panel is the trading window. The right panel is the voting panel, which is inactive now because we are in the trading stage. Just above the table, is your cash holdings. At the beginning of the experiment, you will be loaned an initial amount of cash of 200 points, which will not be included in your final earnings. Trading occurs in the following way. At any time during this trading period, any member may post a bid for any amount between 1 and 100 points, which indicates an amount that you are willing to pay to buy the other member’s vote. This bid will be posted on the trading board on the computer screens

of all committee members. If some other member has already posted a bid to buy, you may post your own bid, but your bid must be an improvement, i.e., a higher bid. Whenever a new bid is entered, it cancels any outstanding bid if there is one. If another member has an active bid, then you may accept that bid, in which case a trade has occurred. You have traded your vote to the other member, and in exchange the other member pays you his bid. Similarly, if you have an active bid and the other member accepts it, you receive their vote, but you must pay the other member the amount of your bid. Trade is entirely voluntary. If a trade occurs, then the trading board is open once again for new bids. Because there is no longer an active bid, any new bid between 1 and 100 is acceptable. Once a new bid has been made, additional bids must be improvements, until another trade occurs, if it does. Bids may not be canceled. The trading period ends after 2 minutes. There are two additional trading rules. First, if your cash holdings ever become 0 or negative, you may not place any bids until it becomes positive again. Second, you may not sell votes if you do not have any.

As the experiment proceeds, your cash holdings will be updated to reflect any earnings you make. It increases when you sell your vote or when you earn your outcome value as a result of the voting. It decreases when you buy a vote. At the top right, above the voting window is a countdown timer that tells you how much time is left in the trading period. The timer will turn red when there are 10 seconds left in the trading period. There is a history panel in the lower part of the screen which will keep track of the history of the current and all past matches.

At the bottom of the middle trading panel there is an area where you can type in your bid. When you do so, it will look like this: [SCREEN 2, 54 entered]. Of course the bid you see here is just for illustration. Your bids must always be between 1 and 100. After you type a bid in, you click the “bid” button just to the right, and your bid will appear in middle column of the trading table above, labeled “Bids”, and your temporary committee member number will be displayed in the left column, labeled “Buyer ID”. All members in your committee see this information [SCREEN 3, WITH INFO IN TABLE] You may revise your bid at any time simply by entering a new bid, which must be greater than the current bid listed in the table. [SCREEN 4]. This member entered a new bid of 57, so now 57 is the current bid, canceling his earlier bid. Other members of your committee may, at any time, also submit improving bids. [SCREEN 5 WITH A NEW BID OF 91]. If one of the other members’ bid is the current bid, you may accept it by clicking on the “Sell at Current Bid” button. This seals a trade between you and that other member, where you have now traded away your vote and the other member pays you his or her bid. [SCREEN 6]. Notice that when you do this your temporary committee member number is entered under the “Seller #” column, and the left panel is updated to show that you now have 0 votes and the other

member has 2 votes. Your cash holdings are also updated. [point out on screen] The screen of the other person who just traded will look like this. [SCREEN 7] The trading period is 2 minutes, however, if there is no activity for 30 seconds, the trading period will terminate early. This ends the trading phase of the match.

Now that the trading phase of the match is over, we proceed to the voting stage. Your screen would now look like [SCREEN 8]. Member 1's screen would look like [SCREEN 9]. In the voting stage, the trading window is deactivated and the voting window to the right is activated. At this stage, you simply cast your votes by clicking on the vote button. These votes are automatically cast as votes for outcome X if you are in the X group, and are automatically cast as votes for outcome Y if you are in the Y group.

After you and the other members of your committee have voted, the results are displayed in the right hand panel, and summarized in the history screen. [SCREEN 10] [Go over the columns of the history screen and explain the "Payoff" column that summarizes what you earned this match: in this case, payoff is the same as net profit from trading.] The other member's screen will look like this. [SCREEN 11. Explain payoff screen.]

After all committees are finished, we proceed to the next match, where you are randomly grouped into new committees, and randomly assigned new outcome values. Are there any questions before we proceed to the first practice match? You are not paid for the practice match, so it has no effect on your final earnings. The only purpose of the practice match is to help you understand how the computer interface works.

[SCREEN 13: Summary slide] [START SERVER]

We will now proceed to the practice match. Remember that you are randomly assigned to a committee in this match. Similarly, your outcome value, your committee member number, the other participants in your committee, and your group are assigned randomly. Please click on the icon marked VM. Then enter your first and last name and click on submit. Then wait. Please don't use the computer while waiting.

[CONNECT EVERYONE AND START]

Please complete the practice match on your own. Remember, you are not paid for these practice matches. Feel free to raise your hand if you have any questions.

[WAIT FOR SUBJECTS TO COMPLETE PRACTICE MATCH]

The practice match is now over. Remember, you will not be paid the earnings from this practice match. Any questions?

If you have any questions from now on, raise your hand, and an experimenter will come and assist you. We will now begin the 25 paid matches.

[GO TO NEXT MATCH]

Please notice that your cash holdings are reinitialized to 200. This 200 is a loan that will be subtracted from your cash holdings in the last match.

(Play 25 real matches) [After last MATCH, read:]

This is the end of the experiment. You should now see a popup window, which displays your total earnings in the experiment. Please record this on your payment receipt sheet, rounding up to the nearest quarter. After you are done, please, click OK to close the window. Do not close any other windows on your computer and do not use your computer for anything else. Also enter \$10.00 on the showup fee row. Add the two numbers and enter the sum as the total.

[Write output]

We will pay each of you in private in the next room in the order of your Subject ID numbers. Remember you are under no obligation to reveal your earnings to the other players.

Please put the mouse behind the computer screen and do not use either the mouse or the keyboard at all. Please be patient and remain seated until we call you to be paid. Do not converse with the other participants or use your cell phone. Thank you for your cooperation.

Could the person with subject ID number 0 please go to the next room to be paid. Please bring all your belongings with you, including your payment receipt sheet.